

SEQUENCE LISTING

SEQ ID 1

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SEQ ID 2

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SEQ ID 3

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SEQ ID 4

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SEQ ID 5

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SEQ ID 6

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SEQ ID 7

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SEQ ID 8

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SEQ ID 9

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SEQ ID 10

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SEQ ID 11

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SEQ ID 12

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SEQ ID 13

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SEQ ID 14

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SEQ ID 15

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SEQ ID 16

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SEQ ID 17

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SEQ ID 18

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GTGCTGTGTAG

SEQ ID 19

MLTDLRAVNAVQPMPGLPGLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGLMNSPTICQTFVGRALQ
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6/25

LDQIATLIGQTRLRIIKLCGNDPDKIVVPLTKEQVRQAFINSGAWKIGLANFVGIIIDNHYPKTKIFQFLKLTWILPKITRREPLENALTFTDGS
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SEQ ID 20

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VSV

SEQ ID 21

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SEQ ID 22

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SEQ ID 23

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SEQ ID 24

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GTAGATTGTTTACTTGCAATTGATTCAACTTTTAATTGGCGGCACCGTATTTCTGCTGTGTAGAGCAAGAGAGGGCGTGTGGATCTCTGTGTCCGTGGA
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CATCACTGGGACATGGTTAGAGGAGCTCAGACTTAAATAGTCAAAGAATATTAACTCAGTTTACGATTTTCCAAATTAATAAACAATTTTGAAGCATCA
AAGCCATTTAAATTTGATGCCAGGAAGTGAAGCAATTCAGGAGTTGCTGATGGCTCGCAATCTTAACCTGTCACTTGGGTTAAGACCATCGG
AAGTACTATGATTATAAATCTCATATTAATCCTTGTGTGCTGTTTTGTCTGTTGTAGTCTGCAGGTGTACCAACAGCTCCGAAGAGACAGCGAC
CATCGAGAACGGGCCA

SEQ ID 25

ATGGGGCTCTCCAACCCGGTTGCCCTCTCCGGCCATGATCCCAAAGATTGGCCTTTAATTATAATTGATCTAAAGGATTGCTTTTTTACCATCC
CTCTGGCAGAGCAGGATTGTGAAAAATTTGCCCTTTACTATACCAGCCATAAATAAAGAACAGCCACCAGGTTTCACTGGAAAGTGTACCTCA
GGGAATGCTTAATAGTCCAACATTTTGTGACACTTTTGTAGGTGAGCTCTTCAACAGTGAGAGAAAAGTTTTAGACTGTTATATTATTCATTAT
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GAAACTAATTTGCTGGAAAGATAATAAAAAAAGACATGGGAAATAGGGAAGGTGATAACCTGGGGGAGAGGTTTTGCTTGTGTTTACCAGGAGA
AATCAGCTTCCTGTTTGGTTACCCACTAGACATTTGAAGTCTACAATGAACCATCGGAGATGCAAGAAAGGGCCTCCACGGAGATGGTAACA
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CAGCGACCATCGAGAAGCGGCCATGATGACGATGGCGGTTTTGTCGAAAAGAAAGGGGAAATGTGGGAAAGCAAGAGAGATCAAAATGTTACT
GTGCTGTGTAG

SEQ ID 26

MQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVQTPESMLLAALMIVSMVSLPMPAGAAAANYT
YWAYVPFPLIRAVTWMDNPTEVYVNDVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVVEVPTVSPICRFTYHVMVSG
WSLRPRVNYLQDFSRKFRPKGPCKEIPKESKNTEVLVVEECVANSVILQNEFGTIIIDWAPRGQFYHNCSGQTQSCSAQVSPAVIDSLT
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IVIKPDSQTITCENRLLTCTIDSTFNWQHRILLVRAREGVWIPVSMRDPWEASPSVHILTEVLKGVNRSKRFIPTLIIVIMGLIATATAAVAGVA
LHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGREDNLT
LDISKLEQIFEASKAHLNLPVGTAEIAGVADGLANLNPVTWVKITIGSTTIINLILILVCLFCLLLVCRCTQQLRRDSHRERAMMTMAVLSKRKGG
NVGSKRDQIVTVSV

SEQ ID 27

MGPLQPLPSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMNSPTICQTFVGRALQPVREKFSDCYIIHY
IDDLCAAEKDKLIDCYTFLQAEVANAGLAIASDKIQSTPFFHYLGMQIENRKIKPKQKIEIRKDTLKLNDQKLLGDINWIRPTLGIPTYAMSNL
FSILRGDSLDNSQRILTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIIONTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTRLR
ITKLCGNDPKIVVPLTKEQVRQAFINSQAWQIGLANFVGLIDNHYPKTKIFQLKLTWILPKITRREPLENALTFTDGSNGKAAATGPKRVI
KTPYQSAQRDELVAIVITVLQDFDQPINIISDSAYVVQATRDVETALIKYSMDQDLNQLFNLLQQTVRKRNFPPYITYIRAHTNLPGLPTKANEQADL
LVSSALIKAQELHALTHVNAAGLKNKFDVWTKQAKDIVQHTQCQVLHLPTQEAGVNRGLCPNALWQMDVTHVPSFGRISYHVTVDTYSHFIWAT
CQTGESTSHVKKHLLSCFAVMGVPEKIKTDNGPGYCSKAFQKFLSQWKSHTTGIPIYNSQQAIVERNTNRLTKQLVKQKEGDSKECTTPQMQLNL
ALYTLNFLNIYRNQTTTSAEQHLTGKKNSPHEGLIWWKDNKNKTWEIGKVIWGRGFACVSPGENQLPVWLPTRHLKFYNEPIGDAKRASTEMVT
PVTWMDNPIEVYVNDVWVPGPIDDRCPAKPEEEGMMINISIGYRYPICLGRAPGCLMPAVQNWLVVEVPTVSPISRFTYHVMVSGMSLRPRVNYLQD
FSYQSRSLKFRPKGPCKEIPKESKNTEVLVVEECVANSVILXNNEFGTIIIDWAPRGQFYHNCSGQTQSCPSAQVSPAVIDSLTESLDKHKHKLQ
SFYFWEWGEKGISTPRPKIVSPVSGPEHPELWRLTVASHHRIWISGNQTLERDRKPFYITDNLSSLTVPLQSCVKPPYMLVVGNIIVIKPDSQTITC
ENRLLTCTIDSTFNWQHRILLVRAREGVWIPVSMRDPWEASPSVHILTEVLKGVNRSKRFIPTLIIVIMGLIATATAAVAGVALHSSVQSVNFVN
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VSV

SEQ ID 28

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVQTPESMLLAALMIVSMVSLPMPAGAA
AANYTYWAYVPFPLIRAVTWMDNPTEVYVNDVWVPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNWLVVEVPTVSPICRFTY

9/25

HMVSGMSLRPRVNYLQDFSYQSRSLKFRPKGKPCKEIPKESKNTTEVLVWEECVANSVILQNNFEGTIIDWAPRGQFYHNCSGQTQSCPSAQVSPAV
DSDLTESLDKHKHKLQSFYPWEWEGKISTPRPKIVSPVSGPEHPHELWRLTVASHHIRIWSGNQTLTDRDRKPFYITDLNSSLTVPLQSCVKPPYM
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VAGVALHSSVQSVNFVNDWQKNSTRLWNSQSSIDQKLANQINDLRQTVIWMGDRIMSLEHRFQLQCDWNTSDFCITPQIYNESEHHWDMVRRHLQGR
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SEQ ID 29

AGTTCTACAATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACGGAGACATCGCAATCGAGCACCGTTGACTCACAAGATGAACAAAA
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ATATCTAGAGAACACAAAGGTGACACAAACCCAGAGAGTATGCTGCTTGACGCTTGATGATTGATCAATGGTGTAAGTCTCCCTATGCCTGCA
GGA

SEQ ID 30

TCTGCAGGTGTACCCAACAGCTCCGAAGAGACAGCGACCATCGAGAACGGGCCATGA

SEQ ID 31

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTTQTPESMLLAALMIVSMVSAGVPNSSEE
TATIENGP

SEQ ID 32

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKSAGVPNSSEETATIENGP

SEQ ID 33

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSTGHDDGGFVEKKRGKCGEKQERSDCYCVVERSRRRLHFVLY

SEQ ID 34

MNSLEMQRKVWRWRHPNRLASLQVYPAAPKRQQPARMGHSDGGFVKKRGGYVRKREIRLSLCLCRKGRHKKLHFVLY

SEQ ID 35

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVILQVYPTAPKRQRPSTGHDDGGFVEK
KRKCGEKQERSDCYCVVERSRRRLHFVLY

SEQ ID 36

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVYPTAPKRQRPSTGHDDGGFVEKKRGK
CGEKQERSDCYCVVERSRRRLHFVLY

SEQ ID 37

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTTQTPESMLLAALMIVSMVYPTAPKRQ
PSTGHDDGGFVEKKRGKCGEKQERSDCYCVVERSRRRLHFVLY

SEQ ID 38

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSTGHDDGGFVEKKRGKCGEKQERSDCYCVVERSRRRLHFVLY

SEQ ID 39

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSTGHDDGGFVEKKRGKCGEKQERSDCYCVVERSRRRLHFVLY

SEQ ID 40

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SEQ ID 41

MNPSEMQRKGPPQRCLQVYPTAPKRQRPSTGHDDGGFVEKKRGKCGEKQERSDCYCVVERSRRRLHFVLY

SEQ ID 42

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKSAGVPNSSEETATIENGP

SEQ ID 43

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTTQTPESMLLAALMIVSMVSAGVPNSSEE
TATIENGP

SEQ ID 44

MVTPVTWMDNPIEVYVNDSEWVPGPTDDRCPAKPEEGMMINISIVRYPPICLGRAPGCLMPAVQNCLOVYPTAPKRQRPSTGHDDGGFVEKKR
GKCGEKQERSDCYCVVERSRRRLHFVLY

SEQ ID 45

MVTPVTWMDNPIEVYVNDSEWVPGPTDDRCPAKPEEGMMINISIGLQVYPTAPKRQRPSTGHDDGGFVEKKRGKCGEKQERSDCYCVVERSRR
RLHFVLC

SEQ ID 46

MNSLEMQRKVWRWRHPNRLASLQVYPAAPKRQQPARMGHSDGGFVKKRGGYVRKREIRLSLCLCRKGRHKKLHFVLY

SEQ ID 47

MNSLEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLSSTKKAEPPTWAQLKKLTQLATKYLENTKVQTPTESMLLAALMIVSMVVS LMPAGAA
AANYTYWAYVFPPLIRAVTWMDNPTEVYVND SVVWPGPIDDRCPAKPEEEGMMINISIGYHYPPICLGRAPGCLMPAVQNLWEVPTVSPICRFTY
HMSAGVPNSSEETATIENG P

SEQ ID 48

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTLQVYPTAPKRQRPSTGHDDDDGGFVEK
KRGKCGEKQERSDCYCVVERSRRRLHFVMY

SEQ ID 49

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVYPTAPKRQRPSTGHDDDDGGFVEKKRGK
CGEKQERSDCYCVVERSRRRLHFVMY

SEQ ID 50

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVMTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYXLENTKVQTPTESMLLAALMIVSMVYPTAPKRQ
RPSRTGHDDDDGGFVEKKRGKCGEKQERSDCYCVVERSRRRLHFVMY

SEQ ID 51

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CGCTTGGTGGTCAATGGGCAGGTAGCCGATCAAGCGTATGACGCCGCGCATTTGCATCAGCCATGATGGATACTTTCTCGGCAGGAGCAAGGTGA
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G

SEQ ID 52

GCCGCGGAATTCGACTCTAGGCCATTGCATACGTTGTATCTATATCATAATATGTACATTTATATTGGCTCATGTCCAATATGACCGCCATGTTGA
CATTGATTATTGACTAGTTATTAATAGTAATCAATTACGGGGTCAATTAGTTCATAGCCCATATATGGAGTTCGCGTTACATAACTTACGGTAAATG
GCCCGCTGGCTGACCGCCCAACGACCCCGCCCATTTGACGTCAATAATGACGTATGTTCCCATAGTAACGCCAATAGGGACTTTCCATTGACGTCA
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SEQ ID 56

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SEQ ID 57

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SEQ ID 58

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SEQ ID 59

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SEQ ID 60

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SEQ ID 61

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SEQ ID 62

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CCCGAGTGCCAGAGCGCCATCAAGCCCCGTAAGGGCAAGGTGCCCGCCGCGCAGCGACGTGATCAGCGAGTACGTGAAGGCTGCGACGGCATCGGCG
GCGCCATGCACAAGGCCATGCTGATGGCCAGGCCATCACCGCGTGGTGTGGGCGGCCAGGTGCGCACCTTCGGCCGCAAGTGTACAATGCGG
CCAGATCGGCCACCTGAAGAAGAACTGCCCCGTGCTGAACAAGCAGAACATCACCATCCAGGCCACCACCACCGGCCGCGAGCCCCGACCTGTGC
CCCCGTGCAAGAAGGGCAAGCACTGGGCCAGCCAGTGCAGCAGAGTTTCGACAGAAGAACGGCCAGCCCCGAGCGGCAACGAGCAGCGCGCCAGC
CCCAGGCCCCCAGCAGACCGCGCCTTCCCCATCCAGCCCTTCGTGCCCCAGGGCTTCCAGGGCCAGCAGCCCCCCTGAGCCAGGTGTTCCAGGG
CATCAGCCAGCTGCCCGAGTACAACAACCTGCCCCCCCCCAGGCCGCGGTGCAGCAGGCTTAA

SEQ ID 63

ATGTGGGAACCATTTGTCGGGAAACGAGCAAGGGGCCAGCCTCAGGCCCCACAACAACCTGGGGCATTCCTAATTCAGCCATTGTTCTCTCAGGGT
TTTCAGGGACAACAACCCCACTGTCCCAAGTGTTCAGGGAATAAGCCAGTTACCACAATAACAATTTGTCGCCGCAAGCGGCAGTGACG
AGTAGATTTATGTACTATACAAGCAGTCTCTGCTTCCAGGGGAGCCCCACAAAAACCCACAGGGGTATATGGACCCCTGCCTAAGGGGACT
GTAGACTAATCTTGGGACGATCAAGTCTAAATCTAAAGGAGTTCAAATTCATACTAGTGTGGTTGATTGAGACTATAAAGGGCAAAATCAATTGG
TTATTAGCTCTTCAATTCCTTGGAGTGCCAGTCCAAGAGACAGGATGCTCAATTTACTCTGCCATACATTAAAGGTGGAATAGTGAATAAA
AAGAATAGGAGGGCTTGAAGCACTGATCCAACAGGAAAGGCTGCATATTGGGCAAGTCAGGTCTCAGAGAACAGACCTGTGTGAAGGCCATTATT
CAAGGAAAACAGTTTGAAGGGTTGGTAGACACTGGAGCAGATGCTCTATCATTGCTTTAAATCAGTGGCCAAAAATTTGGCCTAAACAAAAGGCTG
TTACAGGACTTGTGCGCATAGGCTCAGCAGCTGATCAAAAGTACGGAGATTTTACATTGCTTAGGGCCAGATAATCAAGAAAGTACTGTCTCA
GCCAATGATTACTTCAATTCCTCTTAATCTGTGGGTGAGATTTATTACAACAATGGGGTGGGAAATCACCATGCCCCCTCCATCATATAGCCCC

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ACGAGTCAAAAAATCATGACCAAGATGGGATATATACCAGGAAAGGGACTAGGGAAAAATGAAGATGGCATTAAAAATTCAGTTGAGGCTAAAAATAA
ATCAAGAAAGAGAAGGAATAGGGAATCCTTGCTAG

SEQ ID 64

ATGTGGGCCACCATCGTGGGCAAGCGCGCCAAGGGCCCCGCCAGCGGCCACCACCAACTGGGGCATCCCCAACAGCGCCATCTGCAGCAGCGGGCT
TCAGCGGCACCAACCCCCACCGTGCCAGCGTGAGCGGCAACAAGCCCGTGACCACCATCCAGCAGCTGAGCCCCGCCACCGCGCAGCGCCGC
CGTGGACCTGTGCACCATCCAGGCGGTGAGCCTGCTGCCCGCGAGCCCCCAGAAGACCCCCACCGCGGTGTACGGCCCCCTGCCAAGGGCACC
GTGGGCTGATCCTGGGCGCAGCAGCCTGAACCTGAAGGGCGTGAGATCCACACCAGCGTGGTGGACAGCGACTACAAGGGCGAGATCCAGCTGG
TGATCAGCAGCAGCATCCCCCTGGAGCGCCAGCCCCCGGACCGCATCGCCAGCTGCTGCTGCTGCCCTACATCAAGGGCGGCAACAGCGAGATCAA
GGCATCGGCGGCCCTGGGAGCACCAGCCCCACCGGCAAGGCCGCCCTACTGGGCCAGCCAGGTGAGCGAGAACCGCCCCGTGTGCAAGGCCATCATC
CAGGGCAAGCAGTTCGAGGGCCTGGTGGACACCGCGCGGACGTGAGCATCATCGCCCTGAACAGTGGCCCAAGAACTGGCCCAAGCAGAAGGCCG
TGACCGGCTGGTGGGCATCGGCACCGCCAGCGAGGTGTACAGAGCACCAGATCCTGCAGTGCCTGGGCCCCGACAACAGGAGAGCACCCTGCA
GCCCCATGATCACCAGCATCCCCCTGAACCTGTGGGGCGCGACCTGCTGCAGCAGTGGGGCGCGGAGATCACCATGCCCGCCCCAGCTACAGCCCC
ACCAGCCAGAAGATCATGACCAAGATGGGCTACATCCCCGGCAAGGGCCTGGGCAAGAACGAGGACGGCATCAAGATCCCCGTGGAGGCCAAGATCA
ACCAGGAGCGCGAGGGCATCGGCAACCCCTGCGCTTAA

SEQ ID 65

ATGAATAAATCAAGAAAGAGAAGGAATAGGGAATCCTTGCTAGGGGCGGCCACTGTAGAGCCTCCTAAACCCATACCATTAACTTGGAAAACAGAAA
AACCAGTGTGGGTAAATCAGTGGCGCTACCAAAACAAAACCTGGAGGCTTTACATTTATTAGCAAATGAACAGTTAGAAAAGGGTCATATTGAGCC
TTCTGTTCTCACCTTGAATCTCCTGTGTTTGAATTCAGAAAGAAATCAGGCAAAATGGCGTATGTTAACTGACTTAAGGGCTGTAAACGCCGTAAAT
CAACCCATGGGGCCTCTCCAACCCGGGTGCCCTCTCCGGCCATGATCCCAAGATTGGCCTTAAATTATAATTGATCTAAAGGATTGCTTTTTTA
CCATCCCTCTGGCAGAGCAGGATTGCGAAAAATTGCCCTTACTATACCAGCCATAAATAATAAGAACCCAGCCACCGGTTTCAGTGGAAAGTGTT
ACCTCAGGGAATGCTTAATAGTCCAATATTTGTCAGACTTTTGTAGGTCGAGCTCTTCAACCACTTAGAGAAAAGTTTTCAGACTGTTATATTATT
CATTGTATTGATGATATTTTATGTGCTGCAGAAACGAAAGATAAATTAATTGACTGTTTATACATTTCTGCAAGCAGAGGTTGCCAATGCTGGACTGG
CAATAGCATCTGATAAGATCCAAACCTCTACTCCTTTTCATTATTTAGGGATGCAGATAGAAAATAGAAAATTAAGCCACAAAAATAGAAATAAG
AAAAGACACATTAATAACTAATATGATTTTCAAAAATTACTAGGAGATATTAATTGGATTGCGCCAACCTCTAGGCATTCTACTTATGCCATGTCA
AATTTGTTCTCTATCTTAAGAGGAGACTCAGACTTAATAGTAAAGAATGTTAACCCAGAGGCAACAAAAGAAATTAATTAAGTGAAGAAAAAA
TTCAGTCAGCGCAAAATAAATAGATAGATCCCTAGCCCCACTCCAACCTTTGATTTTGGCCACTGCACATTCTCAACAGGCATCATTATTCAAAA
TACTGATCTTGTGGAGTGGTCATTCTCTCAGTACAGTAAAGACTTTTACATTGTACTTGGATCAAATAGCTACATTAACTCGGTGAGACAAGA
TTACGAATAATAAAATATGTGGGAATGACCCAGACAAAATAGTTGTCCTTTAACCAGGAACAAGTTAGACAAGCCTTTATCAATTCTGGTGCAT
GGAAGATTGGTCTTGCTAATTTTGTGGGAATTATTGATAATCATTACCAAAAACAAAGATCTTCCAGTTCTTAAATTGACTACTTGGATTCTACC
TAAATTAACAGAGCTGAACCTTTAGAAAATGCTCTAACAGTATTACTGATGGTTCAGCAATGGAAAAGCAGCTTACACAGGACCGAAGAACGA
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ATTCTGCATATGTAGTACAGGCTACAAGGGATGTTGAGACAGCTCTAATTAATATAGCATGGATGATCAGTTAAACCAAGCTATTCAATTTATTACA
ACAACTGTAAGAAAAGAAATTTCCATTTTATATTACACATATTCAGACACACTAATTTACCAGGGCCTTTGACTAAAGCAATGAACAAGCT
GACTTACTGGTATCATCTGCACTCATAAAGCACAAGAACTTCATGCTTTGACTCATGTAATGCAGCAGGATTAAAAACAAATTTGATGTCACAT
GGAAACAGGCAAAAGATATGTACAACATTGCACCCAGTGTCAAGCTTTACACCTGCCCACTCAAGAGGCAGGAGTTAATCCAGAGGTCTGTGTCC
TAATGCATTATGGCAATGGATGTCACGCATGTACCTTCATTGGAAGATTATCATATGTTACGTAACAGTTGATACTTATTACATTTTCATATGG
GCAACTTGCCAAACAGGAGAAAGTACTTCCATGTAAAAAATTTATTGCTTGTGTTTGTGTAATGGGAGTTCCAGAAAAATCAAACTGACA
ATGGACCAGGATATTGTAGTAAAGCTTTCCAAAATTTCTTAAGTCAGTGGAAAATTTACATACAACAGGAATTCCTTATAATTCCCAAGGACAGGC
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AATCTAGCACTCTATACTTTAAATTTTTTAACATTTATAGAAATCAGACTACTTCTCTGCAACAACACTTACTGGTAAAGAACACAGCCAC
ATGAAGGAAAATTAATTTGGTGGAAAGATAATAAAAATAAGACATGGGAAATAGGGAAGGTGATAACGTGGGGGAGAGGTTTGTGTTGTTTACC
AGGAGAAAATCAGCTTCTGTTTGGATACCCACTAGACATTTGAAGTTCTACAATGAACCCATCAGAGATGCAAAGAAAAGCACCTCCGCGGAGACG
GAGACATCGCAATCGAGCACCCTGACTCACAAGATGAACAAAATGTTGAGCTCAGAAGAACAGATGAAGTTGCCATCCACCAAGAAGGCAGAGCCG
CCAACCTTGGGCACAATAAAGAGCTGACGCAGTTAGCTACAAAATATCTAGAGAACAACAAGGTGACACAACCCAGAGAGTATGCTGCTTGACG
CCTTGATGATTGTATCAATGGTGGTAAGTCTCCCTATGCCTGCAGGAGCAGCTGCAGCTAA

SEQ ID 66

ATGAACAAGAGCCGCAAGCGCCGAACCGGAGAGCCTGCTGGGCGCCGCCACCGTGGAGCCCCCAAGCCCATCCCCCTGACCTGGAAGACCGAGA
AGCCCGTGTGGGTGAACAGTGGCCCCTGCCCAAGCAGAAGCTGGAGGCCCTGCACCTGCTGGCCAACGAGCAGCTGGAGAAGGGCCACATCGAGCC
CAGCTTCAGCCCCGTGAACAGCCCCGTGTTCTGTATCCAGAAGAAGAGCGGCAAGTGGCGCATGCTGACCGACCTGCGCGCCGTGAACGCCGTGATC
CAGCCCATGGGCCCCCTGAGCCCGGCCGCGCCAGCATGATCCCAAGGACTGGCCCTGATCATCATGACCTGAAGGACTGCTTCTTCA
CCATCCCCCTGGCCGAGCAGGACTGCGAGAAGTTCGCTTACCATCCCCCGCCATCAACAACAGGAGCCCCGCCACCCGCTTCAGTGGAAAGGTGCT
GCCCCAGGGCATGCTGAACAGCCCCACCATCTGCCAGACCTTCGTGGGCGCGCCCTGCAGCCCGTGCAGGAGAAGTTACGCGACTGCTACATCATC
CACTGCATCGACGACATCTGTGCGCCCGGAGACCAAGGACAAGCTGATCGACTGCTACACCTTCTGCGAGGCGGAGGTGGCCAAACGCCCGCCTGG
CCATCGCCAGCGACAAGATCCAGACCAGCACCCTTCCACTACCTGGGATGCAGATCGAGAACCAGATCAAGCCCCAGAAGATCGAGATCCG
CAAGGACACCTGAAGACCTGAGACGACTTCAGAAGCTGCTGGGCGACATCAACTGGATCCGCCCCACCTGGGGATCCCCACCTACGCCATGAGC
AACCTGTTTCAGCATCTGCGCGGCGACAGCGACCTGAACAGCAAGCGCATGCTGACCCCCGAGGCCACCAAGGAGATCAAGCTGGTGGAGGAGAGA
TCCAGAGCGCCAGATCAACCGCATCGACCCCTGGCCCCCTGCAGTGTCTGATCTTCGCCACCGCCACAGCCCCACCGGCATCATCATCCAGAA

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CACCGACCTGGTGGAGTGGAGCTTCTGCCCCACAGCACCGTGAAGACCTTACCCTGTACCTGGACCAGATCGCCACCCTGATCGGCCAGACCCGC
CTGCGCATCATCAAGCTGTGCGGCAACGACCCCGACAAGATCGTGGTGGCCCTGACCAAGGAGCAGGTGCGCCAGGCCCTCATCAACAGCGCGCCT
GGAAGATCGGCCTGGCCAACTTCGTGGGCATCATCGACAACCACTACCCCAAGACCAAGATCTTCCAGTTCCTGAAGCTGACCACCTGGATCCTGCC
CAAGATCACCGCGCGGAGCCCTGGAGAACGCCCTGACCGTGTTCACCGACGGCAGCAACGGCAAGGCCGCTACACCGGCCCAAGGAGCGC
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ACAGCGCTACGTGGTGCAGGCCACCCGCGACGTGGAGACCGCCCTGATCAAGTACAGCATGGACGACAGCTGAACAGCTGTTCAACCTGCTGCA
GCAGACCGTGCAGAACGCAACTTCCCTTCTACATCACCCACATCCGCGCCACACCAACCTGCCCGGCCCTGACCAAGGCCAAGGAGCAGGCC
GACCTGCTGGTGGAGCAGCGCCCTGATCAAGGCCAGGAGCTGCACGCCCTGACCCAGCTGAACGCCCGGCCCTGAAGAACAAGTTCGACGTGACCT
GGAAGCAGGCCAAGGACATCGTGCAGCACTGCACCCAGTGCCAGGTGCTGCACCTGCCACCCAGGAGCGCGCGTGAACCCCGCGGCCCTGTGCC
CAACGCCCTGTGGCAGATGGACGTGACCCACGTGCCAGCTTCGGCCGCTGAGCTACGTGCACGTGACCGTGGACACCTACAGCCACTTCATCTGG
GCCACCTGCCAGACCGCGGAGAGCACCAGCCAGTGAAGAAGCACTGCTGAGCTGCTTCGCCGTGATGGCGTGGCCGAGAAGATCAAGACCGACA
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CATCGTGGAGCGCACCAACCGCACCTGAAGACCCAGTGGTGAAGCAGAAGGAGGGCGGCGACAGCAAGGAGTGCACACCCCGCCAGATGCAGCTG
AACTGGCCCTGTACACCTGAACCTTCTGACATCTACCGCAACCAAGACCCAGCGCGGAGCAGCAGCTGACCGGCAAGAAGAAGACAGCCCC
ACGAGGGCAAGCTGATCTGGTGAAGGACAACAAGAACAAGACCTGGGAGATCGGCAAGGTGATCACCTGGGGCGCGGCTTCGCTGCGTGGAGCC
CGGCGAGAACCAGTGGCCGTGGATCCCCACCGCCACCTGAAGTTCACAACAGGCCATCCGCGACGCCAAGAAGAGCACCAGCGCCGAGACC
GAGACAGCCAGAGCAGCAGCGTGGACAGCCAGGACGAGCAGAACGGCGACGTGCGCCGACCGACGAGTGGCCATCCACCAGGAGGGCCGCGCG
CCAACCTGGGACCAACCAAGAGGCGGACGCCGTGAGCTACAAGATCAGCCGCGAGCACAAGGGCGACACCAACCCCGCGAGTACGCCGCTGCA
CTGGACGACTGCATCAACGGCGCAAGAGCCCCCTACGCTGCCGACGAGTGCAGCGCTTA

SEQ ID 67

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPEMMLLAALMIVSMVSAGVNSSEE
TATIENGA

SEQ ID 68

MNPSEMQRKAPRRRRHRNRAPLTHKMNMVTSEEQMKLPSTKKAEPPTWAQLKKLTQLATKYLENTKVTQTPEMMLLAALMIVSMVYPTAPKRQR
PSRTGHDDGGFVEKKRGKCGEKQERSDCYCVVERSRRRLHFVLYA

SEQ ID 69

MGQTSKISKYASYLSFIKILLKRGVVKVSTKNLIKLFQIIEQFCPFPEQGTLDLKDWRIGKELKQAGRKGNIIPLTWVNDWAIKAALPEPQT
EEDSVSVSDAPGSCIIDCNENTRKKSQKETEGHCEYVAEPVMAQSTQNVNDYNQLQEVIIYPETLKEGKGPVLVGPSESKPRGTSPLPAGQVPVTLQ
PQKQVKENKTQPPVAYQYWPAPLQYRPPESQYGYPMPPAPQGRAPYQPPTRRLNPTAPPSRQSKLHEIIDKSKEGDEAWQFPVTLPEMPP
GEGAQEGEPPTVEARYKSFISIKLLKDMKEGVKQYGPNSPYMRTLDSIAHGRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRANPPV
NIDADQLLGIGQNWSTISQALMQNEAIEQVRAICLAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADKARKVIVELMAYENAN
PECQSAIKPLKGVKVPAGSDVISEYVKACDGIGGAMHKAMLAQAITGVVLGGQVRTFGRKCYNCGQIHLKKNCPVLNQNITIQATTGREPPDLC
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPPAQQTGAFFIQPFVPOGFGQPPPLSQVFQGISQLPQYNNCPPPQAAVQA

SEQ ID 70

MGQTSKISKYASYLSFIKILLKRGVVKVSTKNLIKLFQIIEQFCPFPEQGTLDLKDWRIGKELKQAGRKGNIIPLTWVNDWAIKAALPEPQT
EEDSVSVSDAPGSCIIDCNENTRKKSQKETEGHCEYVAEPVMAQSTQNVNDYNQLQEVIIYPETLKEGKGPVLVGPSESKPRGTSPLPAGQVPVTLQ
PQKQVKENKTQPPVAYQYWPAPLQYRPPESQYGYPMPPAPQGRAPYQPPTRRLNPTAPPSRQSKLHEIIDKSKEGDEAWQFPVTLPEMPP
GEGAQEGEPPTVEARYKSFISIKLLKDMKEGVKQYGPNSPYMRTLDSIAHGRLIPYDWEILAKSSLSPSQFLQFKTWWIDGVQEQVRRNRANPPV
NIDADQLLGIGQNWSTISQALMQNEAIEQVRAICLAWEKIQDPGSTCPSFNTVRQGSKEPYPDFVARLQDVAQKSIADKARKVIVELMAYENAN
PECQSAIKPLKGVKVPAGSDVISEYVKACDGIGGAMHKAMLAQAITGVVLGGQVRTFGRKCYNCGQIHLKKNCPVLNQNITIQATTGREPPDLC
PRCKKGKHWASQCRSKFDKNGQPLSGNEQRGQPPAQQTGAFFIQPFVPOGFGQPPPLSQVFQGISQLPQYNNCPPPQAAVQA

SEQ ID 71

MWATIVGKRAKGPASGPTTNWGPNSAICSSGSGTTPVTPSVSGNKPVTTIQQLSPATSGSAVDLCTIQAVSLLPGEPPQKTPTGVYGPLPKGT
VGLILGRSSLNLKGVQIHTSVVSDYKGEIQLVISSIPWSASPRDRIAQLLLLPYIKGNSEIKRIGGLGSTDPTGKAAYWASQVSENRPVCKAII
QGKQFEGLVDTGADVSIIALNQWPKNWPQKAVTGLVGIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQWGAETMPAPSYS
TSQKIMTKMGYIPGKGLGKNEGDIKIPVEAKINQEREGINPC

SEQ ID 72

MWATIVGKRAKGPASGPTTNWGPNSAICSSGSGTTPVTPSVSGNKPVTTIQQLSPATSGSAVDLCTIQAVSLLPGEPPQKTPTGVYGPLPKGT
VGLILGRSSLNLKGVQIHTSVVSDYKGEIQLVISSIPWSASPRDRIAQLLLLPYIKGNSEIKRIGGLGSTDPTGKAAYWASQVSENRPVCKAII
QGKQFEGLVDTGADVSIIALNQWPKNWPQKAVTGLVGIGTASEVYQSTEILHCLGPDNQESTVQPMITSIPLNLWGRDLLQWGAETMPAPSYS
TSQKIMTKMGYIPGKGLGKNEGDIKIPVEAKINQEREGINPCA

SEQ ID 73

MNKSRRNRRESLLGAATVEPPKPIPLTWKTEKPVVWNQWPLPKQKLEALHLANEQLEKGHIEPSFSPWNSPVFVIQKSGKWRMLTDLRAVNAVI
QPMGMLQPLPSAMIPKDWPLIIIDLKDCFTIPLAEQDCEKFAFTIIPAINNKEPATRFQWKVLPQGMNLSPPTICQTFVGRALQPVREKFSDCYII
HCIDIDILCAETKDKLIDCYTFLQAEVANAGLAIASDKIQSTPFFHYLMQIENRKIKPKIEIRKDTLKTLDNFQKLLGDINWIRPTLGIPTYAMS
NLFSILRGSDSLNSKRLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPTGIIQNTDLVEWSFLPHSTVKTFTLYLDQIATLIGQTR

20/25

LRRIKLCGNDPDKIVVPLTKEQVRQAFINSQAWKIGLANFVGIDNHYPKTKIFQFLKLTWILPKITRREPLENALTVFTDSSNGKAAAYTGPKER
YIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVQATRDVETALIKYSMDQLNLQFLNLQQTVRKRNFPFYITHRAHTNLPGLPTKANEQA
DLLVSSALIKAEQLHALTHVNAAGLNKFDVTWKQAKDIVQHCTQCQVLHLPTQEAGVNPRLCPNALWQMDVTHVPSFGLRSYVHVTVDTYSHF
ATCQTGESTSHVKKHLSCFAVMGVEKIKTDNQGPGYCSKAFQKFLSQKISHTTGPYNPSQQAIVERTNRTLQVLKQYKEGGDSKECTPQMQL
NLALYTLNLFNIYRNQTTSAEHLTEGKNSPHEGLIKWKNKNTLIGKVTIWGRGFACVSPGENQLPVPIPTHRLKFNEPIRDAKSTSAET
ETSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANLGTTEADAVSYKISREHKGDTNPREYAACSLDDCINGGKSPYACRSCS

SEQ ID 74

MNKSRRKRRNRESLLGAATVEPPKPIPLTWKTEKPVWVNQWPLPKQKLEALHLLANEQLEKGHI EPSFSPWNSPVFVIQKSGKWRMLTDLRAVNAVI
QFMGPLQPLGSPAMIPKDWPLIIIDLKDCFFTIPLAEQDCEKFAFTIPAINNKEPATRFQWKVLPQGMNSPTICQTFVGRALQPVREKFSDCYII
HCIDIDLCAETKDKLIDCYTFLQAEVANAGLAIASDKIQSTSTPHYLGMIENRKIRPKQKIEIRKDTLKTLLNDFQKLLGDINWIRPTLGIPTYAMS
NLSIILRGSDSLNSKRMLTPEATKEIKLVEEKIQSAQINRIDPLAPLQLLIFATAHSPGTGIIQNTDLVIEWSFLPHSTVKTFTTLYLDQIATLIGQTR
LRIIKLCGNDDPKIVVPLTKEQVRQAFINS GAWKIGLANFVGIIDNHYPKTKIFQFLKLTWILPKITRREPLENALTVFTDGSSNGKAA YTGPKER
VIKTPYQSAQRAELVAVITVLQDFDQPINIISDSAYVVQATRDTVETALIKYSMDQQLNQLFNLLQQTVRKRMFPFYITHIRAHNLPGLPLT KANEQA
DLLVSSALIKAEHLHLLHVNAGADLGNFKFDVTWKQAKDIVQHQCTQVHLHPTQAEGVNRPGLCPNALWQMDVTHVPSFGRLSYHVHTVDTYSHF IW
ATCQTEGSTSHKVKHLLSCFVAMGVPEKIDTNGPGYCSACFAQKFLS QWKISHTTGI PYSNGQGAIVERTNRTLKTQLRVKQEGDSEKCTTPQMQL
NLALYTLNFLNIYRNQTTSAEQHLTGKKNSPHEGKLIWVKDNKNKTWEIGKVIWGRGFACVSPGENQLPVWIPTRHLKFYNEPIRDAKKS TSAET
ETSQSSTVDSQDEQNGDVRRTDEVAIHQEGRAANL GTTKEADAVSYKISREHKGDTNPREYACSLDDCINGGKSPYACRSCSA

SEQ ID 75

TGTGGGAAAAAGAAAGAGAGATCAGACTGTTACTGTGCTATGTAGAAAGAAATAGACATAAGAGACTCCATTTTGTCTGTACTAAGAAAAATTCT
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GTGCAGGATGTGCTTTGTTAAACAAATGCTTGAAGCGACGAAGCTTGTTAAGAGTCATCACCCTCCCTAATCTCAAGTAAGCAGGGACACAACAC
TGCGAAGGCCCGCAGGGACCTCTGCCTAGGAAAGCCAGGTGTTGTCCAAGGTTTCTCCCCATGTGACAGTCTGAAATATGGCCTCTTGGGAAGGGAA
AGACCTGACTGTCCCCTGGCCCGACACCCGTAAGAGGCTCTGTGCTGAGGATTAGTAAAGAGGAAGGAAGGCCCTCTTTCGACATTGAGATAAGAGGAA
GGCATCTGTCTCTGCTCATCCCTGAGGCAATGGAATGTCTTGGTGTAAAGCCGATTGTATATGGAACCTACTAGATGAGAGAAAAATG6CCTTAGG
CTGAGGTTGGGACATGCTGGCGCAATACTGCTCTTTAAGGCATTGAGATGTTTATGTATATGTCATCAAAAAGCAGACATTTTTCTTTTACCT
TGTTTATGATGCAGAGACATTTGTTACATGTTTTCTGCTGGCCCTCTCCCCACTATTACCTATTGTCTTGCACATCCCCCTCTCCGAGATGG
AGAGATAATGATCAATAAAATCTGAGGGAACCTCAGAGACCGGTGCGGCGCGGGTCTCCATATGTCTGAGCGCCGGTCCCCGAGGCACTTTCTTT
CTCTATACTTTGTCTCTGTTGTCTTTCTTTTCTCAAGTCTCTCGTTCACCTGAGGAGAAATGCCACAGCTGTGGAGGGCGAGGCCACTTCCATCTG
GTGCCAACGTGGATGCTTTTCTTAGGGTGAAGGACTCTCGAGTGTGGTCATTGAGGACAAGTCAACGAGAGATTCCCGAGTACGTCTACAGTGA
GCCTTGTGGTAAGCTTGGGCGCTCGGAAGAAGCCAGGGTTAATGGGGCAAACTAAAAGTAAAGTCTCTCATTCCACCTGATGAGAAACCCAGAGG
TGTGGAGGCGAGGCCACCCCTTCAAGGTGAGGTCCTCCCTACGACCATGAGGACAGGTCGTGCCCCAAAGAGGAGCAGAGAGAAGGAGGGAGA
GGGCGCCGAGAGACTTGGAAATGAATGGCAGGATTTTTCAGCGCTG6ACTTGGGTTTCGGGGTCTGCGCTGCTG6CCTTTCCTTGTGTATTTCTCCTAGTCTCT
GCCTAACTATTTAATACAATAAAAGAAAACAGCCCTG6TTCTTGTGGTGTGTTTCCACCTTCCCGGTCCCCGCTGGCTGCCTGGCTTCTCCGCA
GCTCCTGCTGTGTGTATGTGTGTGTGTGCACATCTGTGGGCGTATGTGTGTTGCTCTTTGTAATTGAGGCTGCAGAGTGGAGAGAGCAGGGG
TTTTCTCTGGGACCCAGAGAGAAGGAGCGTTTTTACCACAGCCGAACAGGGCAGGACCCAGCACCCGGGACCAGCGGGACTTTGCCAAGGGGA
TGGACCTGGCTGGCCACGCGGTGTTTGTGTAGGGAAAAGAAAGAGAGATCACAAGTGTGCTATGTAGAAAAGGAAGACATAAACTCCAT
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CCTCATATACGGCTCTGTCGGATGAGGACCTGACCTGCCCCAGCCAGCCAGGCTAAGGGTGTGTGTCAGGAGGATTAGTAAAAGGGGAAG
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TCTGAGAGAAGAAAACCCCTGTGGCTGGAGGTGAGATATGCTAGCGGCAATGCTGCTCTGTTACTCTTTGCTACACTGAGATGTTTGGGTGGAGA
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CTCCCCACTATCGCCCTGTTCTCCACCGCATTTCCCTTGTCTGAGATAGTGAATAAGTAAATCTGTAGATACCAAGGAACTCAGAGACCATGGCCG
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CCCTCCTGACGAGAAATACCCACAGGTGTGGAGGGCTGGCCCCCTTCACTGTAGGCCCAATGTGGGTGCTTTCTTAGGGTGAAGGTACTCTACA
GTGGGTGCTATTGAGGACAAGTTGACGAGAGAGTCCAAGTACGTCACCGTGACGCTTGGCGTAAAGCTTGTGCTTAGAGGAACCCAGGGTAACGA
TGGGGCAAACTGAAAGTAAATATG6CCTTTAATGACTGCTTTATTAATAATCTTTTAAAGAAAGGGGAGTTAGAGCTTCTACAGAAAATCTAAATTAC
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AGGTTAGACAAGCACAACCCCAAGAGAAAATCAAGTAGAAAGGACAGAGTCTCTATCCCGGCAATGCCAATCAGATACAGTATCACAATATCA
CGCGGTAGAAAATAAGACCAACCGCTGGTAGTTTATCAATAACGGCTGCCAACCGAGTCTCAGTATGCGCTCTCAGAGGTTCAATACAGACCT
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SEQ ID 77

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SEQ ID 78

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SEQ ID 79

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SEQ ID 80

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